

Reply to: Nic Clyde
NSW Coordinator
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10 December 2024

Submission: HVO North Mod 8

Thank you for the opportunity to submit to this modification application. Lock the Gate objects to this modification because it will cause unacceptable greenhouse pollution that will harm NSW's people, economy and environment and comes with no plans for orderly closure of the Hunter Valley Operations site.

Preventing methane emissions is crucial to NSW and Australia's climate change commitments because its contribution to global warming is intense and brief. If available means are used to cut methane pollution by half by the end of this decade, the rate of warming we're experiencing right now could be slowed by 30%¹ keeping the window open to prevent temperatures rise above 1.5 or 2 degrees. We note, in this context, that analysis from the IEA concludes that "One of the most effective ways to cut down on coal mine methane is likely to be to cut coal consumption itself."²

Summary

- The core development consent for HVO North was granted in 2004 and a large modification was granted in 2013. The profound change in environmental circumstances in the subsequent decades amounts to a substantial change to the development itself. Mining that was approved in 2004 is not "substantially the same development" as mining proposed in 2024 given the critical accumulation of greenhouse gases in the atmosphere. Therefore, this proposal is not a modification but a new development application.
- Glencore's estimate is that the extension would create 410,000 tonnes of direct (Scope 1) emissions at the HVO North site, and 1.15Mt at HVO South, for a total of 1.56Mt in direct emissions over just eighteen months. This development is not consistent with NSW's legislated climate change goals and the proponent makes no attempt to make it so.
- The estimation of fugitive emissions from the HVO North portion of this Modification is implausibly low and requires expert verification.
- In any case, there is clearly a rise in greenhouse gas emissions resulting from this application, contrary to the EPA's *Guide for Large Emitters* which requires proponents to demonstrate a trajectory consistent with NSW's statutory emissions reduction goals. The proponent has failed to meet the requirements of the Guide for Large Emitters and its argument that 1.56 million tonnes of greenhouse pollution over 18 months is "not significant" is manifestly absurd.

¹ Ilissa B Ocko et al 2021. *Environmental Research Letters*. 16 054042:
<https://iopscience.iop.org/article/10.1088/1748-9326/abf9c8>

² IEA 2023. "Strategies to reduce emissions from coal supply"
<https://www.iea.org/reports/global-methane-tracker-2023/strategies-to-reduce-emissions-from-coal-supply#abstract>

- The methane emissions at the HVO South site that would be enabled by this Modification are grounds for its refusal, given that the proponent has made no attempt to avoid or minimise these emissions.
- The downstream emissions enabled by this application, the use of coal mined from both HVO North and South for 18 months, Downstream emissions from the coal mined at both sites would be 56Mt over just eighteen months. **This is the same amount of carbon as is expected to be absorbed in one year by the whole land sector in Australia in 2025.**³
- The Department must seek further information from the proponent about the downstream emissions from this project and their place in global warming trajectories.
- The Expert Panel's previous recommendation that pre-mine drainage be deployed on the HVO South is relevant to this application but no mitigation, avoidance or reduction has been proposed by the proponent.
- As the only proven method of abatement to date at HVO is to reduce coal production, in lieu of any other measure up to the task, HVO Mod 8 - if approved - must be required to reduce production to meet their emissions reduction goal. Such an action should come with a detailed closure plan for the HVO complex, ensuring support for the workforce and provision for complete rehabilitation of the site.

Project context

The proponent's description of the project context makes no mention of climate change, though it obliquely references an "energy transition."

It cites the June 2024 *Resources and Energy Quarterly* in saying that "demand for Australian coal is expected to remain relatively favourable" without mention of NSW's and Australia's participation in global efforts to prevent global average warming over 1.5 degrees. The market context for this proposed modification must be outlined in relation to coal demand scenarios consistent with achieving NSW's statutory climate change goals of preventing global warming over 2 degrees and pursuing efforts to keep global average warming to 1.5 degrees above pre-industrial temperatures. This is crucial information for the Department's evaluation of this modification application.

The proponent cites the *Hunter Regional Plan 2041* and the commitment in it that "the NSW Government will work to support coal-dependent communities to diversify for the future with good employment opportunities." This application is not consistent with that plan or commitment. Orderly closure planning for coal mines is essential to ensure a robust and stable future for the Hunter region, but the proponent makes no mention of closure planning in this application.

Unlike BHP, which is seeking an extension of time for Mount Arthur in order to ensure its orderly closure, the companies that own HVO have given no public indication about how they will ensure the orderly, just and sustainable closure of this mine, which is the second largest in the state. The Department should seek information from the proponent about its plans for the future of this mine site, given that it produces predominantly thermal coal and production and consumption of thermal coal needs to dramatically and immediately fall if New South Wales' statutory climate goals are to be met. Any extension granted to a thermal coal mine that has no published plans for closure and

³ Commonwealth DCCEEW. November 2023. *Australia's Emissions Projections 2023*.
<https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2023.pdf>

support for its workforce and surrounding community is actively creating the risk of social and economic harm in the Hunter region.

“Substantially the same development”

The proponent argues that because the HVO North consent was most recently modified under s75W of the *EP&A Act*, it is a transitional Part 3A development and the application for a modification must only meet the “substantially the same development” test. A development does not exist in isolation from its environment and so a substantial change in environmental context amounts to a substantial change to the development itself. The environmental context for the previously approved mining at HVO North and South has altered to such a degree that it is no longer the same development as it was when assessed 10 and 20 years ago. The environmental context for this application is atmospheric concentrations of greenhouse gas emissions that are perilously high and global average warming edging to 1.5 degrees, putting the New South Wales environment and society at grave risk of catastrophic and irreversible damage. The Department would be negligent in the extreme to treat this as “substantially the same development” as it was before.

Direct greenhouse emissions

The proponent’s Modification Report is misleading. It argues that “the emissions from HVO North with the Modification are expected to be within the range of historically reported and assessed emissions, so that the Modification would not represent a proposed modification that significantly increases emissions or emission intensity beyond what has already been assessed and approved.” This would mean that the EPA’s *Guide for Large Emitters* would not apply. But as the greenhouse gas assessment admits, this modification will enable a significant increase in emissions from the HVO South site, as well as a more moderate increase at HVO North. Together, the emissions impact of this modification will certainly be significant and it is disappointing that the proponent has sought to evade this issue.

The proponent goes on to say that “Notwithstanding, while the Modification would not significantly increase GHG emissions or emissions intensity beyond what has already previously been assessed and approved, the application of the draft Guide for Large Emitters has been considered in relation to the Modification.” The *Guide for Large Emitters* applies to this application and it must be more than “considered.” It must be addressed and its provisions met in full. This means application of the emissions mitigation hierarchy, outline of emissions reduction goals consistent with NSW’s emissions reduction trajectory and an assessment of downstream emissions.

Glencore’s estimate is that the extension would create 410,000kt of direct (Scope 1) emissions at the HVO North site, and 1.15Mt at HVO South, for a total of 1.56Mt over just eighteen months. This is a significant volume of emissions, equivalent to 3% of Australia’s annual fugitive emissions in 2025.⁴

No progress on Scope 1 abatement in 2025 and a very significant increase in 2026

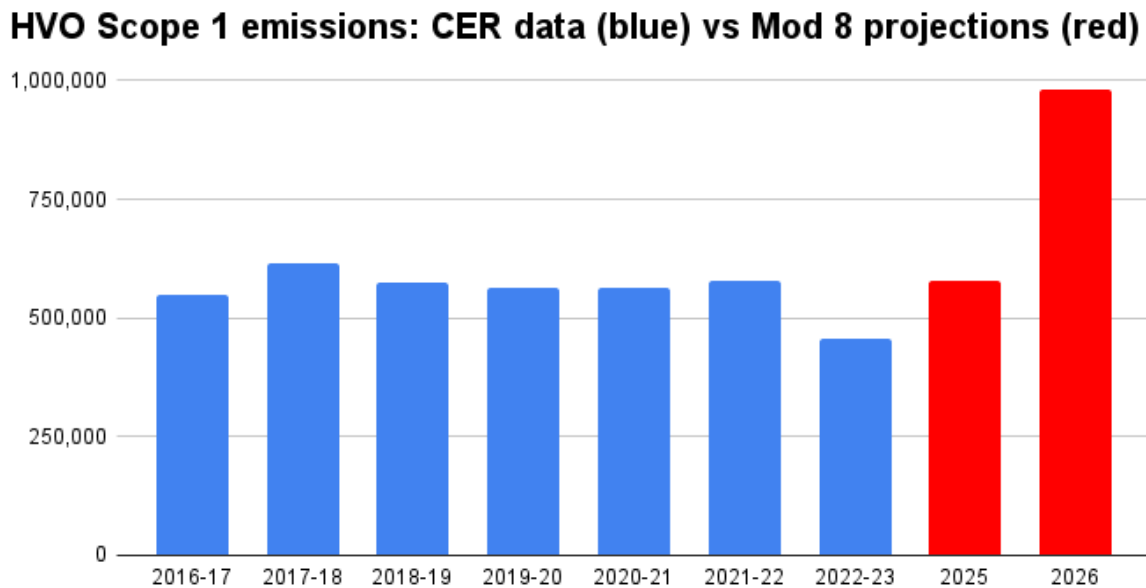
Lock the Gate has graphed Scope 1 projections provided for Mod 8 for the North and South pits against Scope 1 data reported to the Clean Energy Regulator over a seven year period from 2016-17

⁴ Commonwealth DCCEEW, November 2023. Australia’s emissions projections 2023.

to 2022-23 (Figure 1). This data reveals that Yancoal and Glencore are projecting no Scope 1 abatement in 2025 and a very significant increase in Scope 1 emissions in 2026.

In FY23, HVO's Scope 1 emissions declined by 21%, but this appears to be unrelated to the implementation of abatement measures and entirely related to a decline in production of ROM coal in the same year by 24%. In the six years prior to FY23, Scope 1 emissions at HVO were essentially flatlining, with no discernable reductions.

Figure 1: Scope 1 projections for Mod 8 vs Scope 1 CER data (2016-17 to 2022-23)



Data: Historical Scope 1 emissions from CER, [Safeguard facility reported emissions data](#). Projections from Table 7.4 Estimated GHG emissions from HVO North and Table 7.5 Estimated GHG emissions from HVO South, [HVO Mod Report, Nov 2024](#).

Emissions reduction goals are required

The EPA's *Guide for Large Emitters* is clear in regard to emissions reduction goals for new high-emitting projects:

Proponents of large emission projects are expected to set interim and long-term scope 1 GHG emissions goals to make a meaningful contribution to NSW's emissions reduction objectives. (p15)

In step 5 you will set out the long-term and interim emission goals for the project, taking into account anticipated regulatory obligations for the project, mitigations likely to become available during the project life, and how project emissions compare to NSW emissions. (p17)

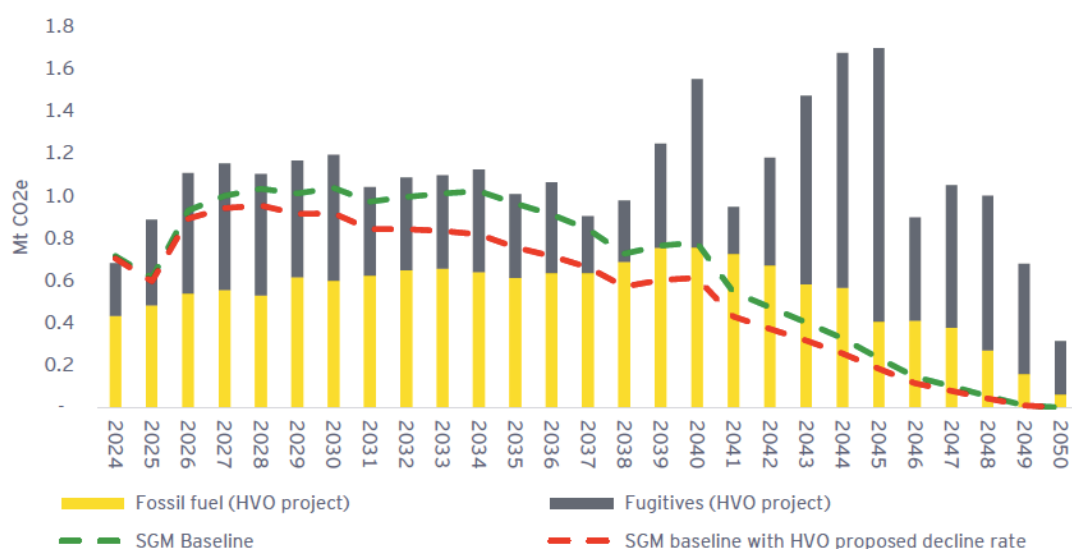
The proponent - in *Appendix C - Air Quality and greenhouse gas assessment* - claims that HVO does not need to set any Scope 1 goals. This is not consistent with the Guide. NSW DPHI should issue a request for further information to HVO requiring the company to plainly establish a scope 1 emissions goal and provide an explanation as to how these goals would constitute "a meaningful

contribution to NSW's emissions reduction objectives." As per Figure 1 above, it's clear that the company is proposing to significantly increase Scope 1 emissions, with no credible abatement plan and this is directly counter to a "a meaningful contribution to NSW's emissions reduction objectives."

We know from the greenhouse assessment of the HVO Continuation Project, that the proponent's aspiration is to continue mining both pits (if approved) for the next two decades and beyond. Information provided by the proponent for the Continuation Project (Figure 2) clearly indicates that this expansion would be emissions intensive. We also know that the HVO Continuation Projects have been modelled by DCCEEW's NZEM team and that Scope 1 emissions from the Project are a major contributor to the NSW emissions gap between "abatement as tracking" and abatement consistent with meeting legislated targets for 2030 and 2035.⁵

Figure 2: HVO Continuation Project Scope 1 emissions projections

Figure 11: HVO Project Scope 1 Emissions Profile vs Indicative Baselines



Source: HVO

Source: EY May 2024, Revised economic assessment, pg 44

NSW Minister for Climate Change Penny Sharpe's Ministerial Statement made clear that meeting legislated targets *"is essential for the future health and wellbeing of the people of NSW, our communities and our environment."* The Statement also sets a clear expectation that *"all sectors need to ratchet down their emissions to meet NSW's legislated targets."* This modification is not consistent with meeting the climate objectives of the NZF Act. This is one of many reasons why NSW DPHI must insist that the Guide for Large Emitters is applied in full to this Modification and reject this application unless it commits to a substantial onsite reduction in emissions.

⁵ See NSW Parliament, QON 2186 - Energy - COAL AND GAS DATA. Answer received on 14 June 2024 and published in [Questions & Answers Paper No. 273](#)

No Scope 1 GHG mitigation measures in force currently nor are any proposed for this modification

Appendix B - Mitigation measures has just a single sentence addressing greenhouse mitigation: “HVO will continue to report its energy use and GHG emissions under the Commonwealth NGER Act on an annual basis.” Reporting emissions does not constitute an act that “reduces” emissions and the company is proposing no mitigation, avoidance or reduction measures at all. At page 22 of Appendix C, HVO claims that “mitigation measures to reduce the level of future GHG emissions from HVO are documented in the *Air Quality and Greenhouse Gas Management Plan* (which would continue for the Modification) and include:

- Planning and designing of operations to minimise fuel usage and to maximise energy efficiency;
- Maintenance of plant and equipment to minimise fuel consumption and associated emissions; and
- Training staff on improvement strategies to minimise fuel usage and maximise energy efficiency.”

Examination of the *Air Quality and Greenhouse Gas Management Plan* for current operations at HVO reveals that none of the measures mentioned above are documented in this plan. At the conclusion of HVO Mod 8 greenhouse assessment (pg 24), HVO is equivocal about adopting even the above minimal abatement measures, saying only that it will “consider relevant initiatives to reduce greenhouse gas emissions in the timeframe of the proposed Modification.” A commitment to “consider” is not a commitment to “implement.”

The proponent claims (pg 23) that “HVO **intends** [our emphasis] to continue to consider and assess the feasibility of mitigation measures” to meet its obligations under the Safeguard Mechanism. NSW has more ambitious targets than the Safeguard Mechanism. The *Guide for Large Emitters* accordingly requires proponents of new high-emitting projects to set emissions reduction goals beyond the Safeguard Mechanism.

The minority owner of the mine, Glencore (49%), goes on to say that it has “corporate voluntary targets to reduce total emissions by 15% by 2026, 25% by 2030, 50% by 2035” which it claims to be applying across their portfolio of coal mines. In the context of their Mod 8 application, there is no indication of how these emissions commitments will be operationalised at HVO particularly as part of this modification application. The Department should require further information from Glencore about the consistency of its “corporate voluntary targets” with NSW’s statutory climate change goals and the purpose, objects and principles of the *NZF Act* including direct and downstream emissions.

There doesn’t appear to be any statement at all from the majority owner Yancoal (51%) about how it is abating emissions at its coal mines or this mining complex.

Mining deep seams in HVO South will cause significant unacceptable fugitive methane emissions.

New information about the degree of methane in the lower seams of the HVO site, the passage of the *Net Zero Future Act* and the need for NSW to take additional concerted action to meet its

emissions reduction targets must prevail over arguments to extend operational consent to mine these deep seams.

Furthermore, the estimates of fugitive emissions at HVO North in 2025 and 2026 in Appendix A of Appendix C of this application should be independently reviewed. Appendix A estimates fugitive emissions from the HVO North site of only 14,005 tonnes in 2025 and only 4,345 tonnes in 2026, from over 11 million tonnes of ROM coal mining. This is an implausibly low number. It means HVO North (alone) in 2026 would have an overall emissions intensity less than a third the coal industry average of .0652 tonnes of carbon dioxide equivalent per tonne. Further explanation is required.

The expert panel's advice on the Continuation Projects made clear that avoiding gas rich areas is the best way to avoid emissions: "The only fugitive emissions avoidance measure available is mine planning that restricts the areal extent of mining and/or the depth of mining." The information available indicates that the highest gas content is in deeper seams to be targeted in Domain 3 (zones 3 and 4, on the HVO South site) and zones 2, 3 and 4 of Domain 1 (on the North site.) The proposed deeper mining at the HVO South site is allowable until 2030 under the existing consent but is unlikely to be able proceed beyond June 2025 without this modification.

Since this application will enable the mining of zones 3 and 4 of Domain 3, the Department should review the panel's advice on this matter. Notwithstanding the mining panel's advice that avoidance is the most effective means to prevent methane emissions, we note that it also recommended that pre-drainage trials should be prioritised in Zones 3 and 4 in Domain 3. Implementing this advice means not allowing HVO to mine these seams until that trial is undertaken, so it likewise has implications for this modification application, but these recommendations are not mentioned by the proponent in the application material.

Downstream emissions

We appreciate the Department's attention to the impact of downstream emissions from the HVO Continuation Projects and request for information from the proponent about this matter. This request must also be made with respect to this modification application. There is ample analysis available describing the trajectory of thermal coal production and use in a global energy scenario consistent with stabilising global average temperatures at 1.5 degrees, and keeping well below 2 degrees. Given that pursuit of these goals are statutory objectives of both NSW and Australia, it is appropriate that greater attention be paid to the downstream emissions from this and other coal mining projects seeking consent, including Modification 8 of HVO North.